



BellSouth Telecommunications, Inc.
Suite 2101
333 Commerce Street
Nashville, Tennessee 37201-3300

615 214-6301
Fax 615 214-7406

Guy M. Hicks
General Counsel

March 24, 1998

VIA HAND DELIVERY

David Waddell, Executive Secretary
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37238

Re: *BellSouth Telecommunications, Inc.'s Entry Into Long Distance
(InterLATA) Service in Tennessee Pursuant to Section 271 of the
Telecommunications Act of 1996*
Docket No. 97-00309

Dear Mr. Waddell:

Enclosed are the original and thirteen copies of the supplemental responses of BellSouth Telecommunications, Inc. to the Second Data Request of the Consumer Advocate Division. A copy has been provided to counsel of record.

Very truly yours,

Guy M. Hicks

GMH:ch

Enclosure

REC'D TN
REG. AUTH.
MAR 24 PM 9 21
OFFICE OF THE
EXECUTIVE SECRETARY

BellSouth Telecommunications, Inc.
TRA Docket 97-00309
CAD's Second Discovery Request
Dated March 6, 1998
Item No. 5
Supplemental Response
Page 1 of 4

REQUEST: In response to Consumer Advocate Division first discovery request
Item 6 (First), BellSouth responded:

The CLECs have requested that notification of rejected orders be delivered to them via EDI, and BellSouth began implementing electronic notification in November 1997, as described below. There currently are no industry standards for providing electronic reject or error notification. BellSouth's current EDI implementation complies with the national standards established by the industry's Ordering and Billing Forum in TCIF version 6.0. However, neither this version-- nor version 7.0, which is scheduled to be implemented on March 16, 1998 -- provides standards for returning information to the CLEC for orders rejected because of errors detected by LEO, LESOG, or SOCS. Despite the lack of industry standards, BellSouth has already developed and implemented the first of a two-stage process to provide error rejection electronically. This mechanism returns an error code and an explanation of the error to CLECs using the EDI interface. This initial stage of this automated reject capability, which was tested by MCI, became operational in November 1997. This stage contains 68 percent of the total electronic rejects to be implemented. The remaining error types are being addressed in the second phase of this implementation. To facilitate this development in the absence of industry standards, BellSouth hosted a conference on October 30 and 31, 1997 for all CLECs using EDI. This conference was necessary because of the nature of EDI, which requires complementary programming on both BellSouth's and the CLECs' side of the EDI interface. The CLECs and BellSouth agreed on the specifications required for the remaining capability which all parties would implement on their respective sides of the EDI interface. The second phase of the reject capability is currently scheduled to be operational on March 16, 1998. Until the second phase is implemented, rejects not included in the 68 percent of error types currently handled by EDI are routed to the Local Carrier Service Center,

REQUEST (cont.): where they can be corrected by the LCSC or faxed to the CLECs if necessary.

- (a) Identify by name and date the CLECs that have requested that notification of rejected orders be delivered to them via EDI.
- (b) BellSouth states:
 - This initial stage of this automated reject capability, which was tested by MCI, became operational in November, 1997.
 - i. Identify CLECs other than MCI that have tested this initial stage.
 - ii. Identify by name all CLEC's operating in Tennessee that are using this initial stage. For each such CLEC identify the date that each began using this initial state.
- (c) BellSouth states:
 - The CLECs and BellSouth agreed on the specifications required for the remaining capability which all parties would implement on their respective sides of the EDI interface. The second phase of the reject capability is currently scheduled to be operational on March 16, 1998.
 - i. Identify all other CLECs authorized to operate in Tennessee that agreed on the specifications required for the remaining capability which all parties would implement on their respective pieces of the EDI interface. (Provide supporting documentation of the agreement.)

REQUEST:

- ii. Identify all CLECs authorized to operate in Tennessee that will begin using the second phase capability on March 16, 1998. (Provide documentation.)
- (d) BellSouth states at one point: "This stage contains 68 percent of the **total electronic** rejects to be implemented." Then later states: "Until the second phase is implemented, rejects not included in the 68 percent of **error types** currently handled by EDI are routed to the Local Carrier Service Center, where they can be corrected by the LCSC or faxed to the CLECs if necessary." (Emphasis added.)

Please clarify. Does the first stage address 68 percent of the types of errors that cause rejects or the types of errors that result in 68 percent of the CLEC order rejections?
- (e) Based on the response to Item No. 3 of the Consumer Advocate Division first discovery request, for each CLEC identify the number of errors that would have been reported to the CLECs by EDI, if this first stage has been implemented.
- (f) Is correct to interpret BellSouth's response to Item No. 6 of the Consumer Advocate's first discovery request in this docket as meaning that presently BellSouth can not notify CLECs electronically of the types of errors that result in 32% of the order rejections?
- (g) Identify the error types that are included in the 32% that BellSouth can not notify CLEC's electronically.

- RESPONSE: (a) BellSouth objects to this request on the grounds that it requests CLEC proprietary information.
- (b) Only MCI has tested this initial stage of EDI. However, all CLECs using EDI are able to receive the initial stage of the notification.
- (c) BellSouth objects to this request on the grounds that the identity of CLECs using EDI or intending to use EDI is CLEC proprietary information. Subject to this objection, all CLECs using EDI are able to receive the initial stage of the notification. All CLECs using EDI version 7.0, which will be released on March 16, 1998, will be able to use the full implementation of the notification.
- (d) The first stage addresses 68% of the types of errors that cause orders to be rejected.
- (e) The requested information is not available.
- (f) Yes. However, after Monday, March 16, 1998 when the full implementation of the notification is released, BellSouth will be able to notify CLECs electronically of 100% of the types of errors that cause orders to be rejected.
- (g) Before March 16, 1998, the 32% of the error types which BellSouth continued to fax during the first phase included: invalid USOC, invalid street address, insufficient feature information, invalid LOCBAN, multiple occurrences of USOC, TN (telephone number) not correct on local service request, end user name not found, insufficient address, invalid list type, invalid date, address not RSAG valid, and all other error conditions that are not listed as "Fatal Rejects." Notification for these error types became available via the EDI interface on March 16, 1998.

REQUEST: In response to Item 15 of Consumer Advocate Division's first discovery request BellSouth stated:

In response to Item No. 14, BellSouth admitted that it does not integrate the LENS pre-ordering and the EDI ordering interfaces for CLECs. Integration of the pre-ordering interfaces is the responsibility of each CLEC, if it desires integration; it is not BellSouth's responsibility. However, since the time of the Louisiana filing, and updated GCI specification for LENS has been made available to interested CLECs. The EC-LITE machine-to-machine pre-ordering interface, which may also be integrated with EDI, became available on December 31, 1997.

- (a) Provide copies of correspondence of the CLECs authorized to operate in Tennessee which notified such CLECs of the updated GCI specification for LENS.
- (b) Provide copies of correspondence both to and from CLECs operating in Tennessee concerning the updated GCI and the integration of the pre-ordering interfaces since BellSouth's filing to provide InterLATA service in Louisiana.
- (c) Identify any CLECs operating in Tennessee that have attempted to integrate the pre-ordering interfaces.
- (d) Provide copies of correspondence both to and from CLECs concerning the EC-LITE machine-to-machine pre-ordering interface, which became available to December 31, 1997.
- (e) Identify all CLECs operating in Tennessee that are using the EC-LITE machine-to-machine pre-ordering interface.

BellSouth Telecommunications, Inc.
TRA Docket 97-00309
CAD's Second Discovery Request
Dated March 6, 1998
Item No. 8
Supplemental Response
Page 2 of 2

REQUEST: (f) Identify any other CLECs operating in Tennessee that have attempted to utilize the EC-LITE machine-to-machine pre-ordering interface but have not been successful.

RESPONSE: (a) There are no documents responsive to this request. Notice concerning CGI specifications is contained on BellSouth's interconnection Web site, a copy of which is attached:
http://www.bellsouth.com/interconnection/cust_let/cust_let.html.

(b) To BellSouth's knowledge, the only CLEC with which BellSouth has corresponded concerning the CGI specifications since BellSouth's filing to provide interLATA service in Louisiana is MCI. See attached documents.

(c) BellSouth has no first hand knowledge regarding which, if any, CLECs are currently integrating the interfaces, although it is BellSouth's understanding that MCI is engaged in this process.

(d) To BellSouth's knowledge, the only CLEC with which BellSouth has corresponded concerning EC-LITE is AT&T. The documents responsive to this request are proprietary and will be made available for inspection at a mutually agreeable time and place subject to the Protective Order entered in this proceeding.

(e) To BellSouth's knowledge, the only CLEC using EC-LITE is AT&T.

(f) BellSouth is unaware of any CLEC other than AT&T which has sought to utilize EC-LITE.

Clifford H. Bowers /AL,BRHM07 11/18/97 11:02

8(6)
Page 1 CAD

MESSAGE
Subject: CGI
Sender: Clifford H. Bowers /AL,BRHM07

Dated: 11/7/97 at 16:21
Contents: 3

Item 1

FROM: Clifford H. Bowers /AL,BRHM07 (Undisplayable address parts)
TO: byan green /smtp (@bstfirewall:0002169860@mcimail.com)
CC: Pamela K. Lee /AL,BRHM07 (Undisplayable address parts)
Judy Rueblinger /AL,BRHM05 (Undisplayable address parts)
Bob Siegel /AL,BRHM02 (Undisplayable address parts)

Item 2

Bryan,

Attached are the release 1.0 CGI specifications. These should give your folks something they can begin working with. Also notice that Bob should have release 1.1 specifications in around four weeks.

Thanks,

Cliff

Item 3

MESSAGE
Subject: CGI
Creator: Bob Siegel /AL,BRHM02

Dated: 11/7/97 at 10:16
Contents: 3

Item 3.1

FROM: Bob Siegel /AL,BRHM02 (Undisplayable address parts)
TO: Clifford H. Bowers /AL,BRHM07

Item 3.2

Cliff:

Attached are the CGI specifications, release 1.0. These specifications will give MCI the capability to build their screen scrapping application. Release 1.1 of these specifications is currently in development and will be released in approximately 4 weeks. This release will give MCI added capability to match some new fields that have recently been added in LENS.

I will forward release 1.1 to you when it is complete.

Item 3.3

LENS Access Technical Specification Access by a Client Application

Overview

This document specifies the details of the interface that can be utilized by a Competitive Local Exchange Carrier (CLEC) to access the BellSouth Telecommunication's Local Exchange Negotiation System (LENS) from software emulating a Web Browser.

The LENS application can be accessed directly by other computer systems bypassing the need for a Web Browser. This paper contains specifications for a methodology for using an application client in place of browser to communicate

11/13/97 13:52

NO. 359 P002



BellSouth Telecommunications, Inc.
Suite 4511
675 West Peachtree Street, N.E.
Atlanta, Georgia 30375

404 527-7020
Fax 404 521-2311

Mark L. Feidler
President - Interconnection Services

November 13, 1997

Mr. Marcel Henry
Regional Vice President
Southern Financial Operations
MCI Telecommunications
Three Ravinia Drive
Atlanta, Georgia 30346

Dear Marcel:

Recently, you brought to the attention of the BellSouth MCI Account Team your concerns over MCI metro's ("MCI") perceived lack of progress on several MCI metro OSS issues, including Change Management, Loss Notification/NDM, RSAG, and Common Graphical Interface (CGI). We then discussed these items on the phone last week. I am now in a position to provide you with an update.

At present, BellSouth is in compliance with the interface obligations and interface duties set forth in the MCI metro/BellSouth Interconnection agreements. The OSS requirements were negotiated between the parties and are contained within Attachment VIII of the Interconnection Agreements. In that Attachment you will find that MCI agreed to accept, on an interim basis, the interfaces approved by BellSouth.

I want to assure you that BellSouth has been very focused in its quest to meet the additional requests from MCI. The outstanding MCI requests are complex and BellSouth must make sure that the responses are fully researched and as correct and current as possible. To ensure MCI understands where BellSouth stands on these issues, I have summarized below their current status and BellSouth's plans for addressing each one.

- **Change Management:** BellSouth is in the process of developing a change management plan. BellSouth appreciates and will consider MCI's input, including MCI's proposal entitled "BellSouth/MCI Change Management Process for OSS Interfaces" that you provided recently. BellSouth's goal is present the plans to you by mid December.

As information, our plans will address BellSouth's support of dual OSS platforms. At this time, BellSouth will support dual platforms associated with EDI releases for 60 days. When technically feasible, the CLECs will have the opportunity to negotiate longer periods for the dual platforms, however, due to the potentially significant expenses associated with supporting multiple platforms, there will likely be additional charges to the CLECs should BellSouth agree to extending the dual platforms beyond 60 days. We will address dual platforms for LENS and other systems as part of our change notification plan that should be finalized in early December.

11/13/97 13:52

NO. 359 P003 -

- **Loss Notification/NDM:** Currently MCI is receiving information regarding disconnections via paper. Pursuant to Attachment VIII, section 2.2.12, MCI has agreed, in a September 10, 1997 letter to Cliff Bowers of BellSouth, to an interim method of notification via Network Data Mover. BellSouth can provide such data via Network Data Mover in June 1998. We understand your desire that we implement this arrangement by the end of the year. This possibility is being reviewed by appropriate BellSouth management. The account team will notify the appropriate MCI representatives by Friday, November 21, 1997, as to whether this delivery date can be moved up.
- **RSAG:** Within the next two weeks, BellSouth will be able to provide you cost estimates and the time and price for developing the detailed design, project plan, and a firm quote for the overall delivery. Please note that BellSouth is exploring the development of an Application Programming Interface (API) that may better suit your needs. It is my understanding that five MCI employees will be at a BellSouth meeting on November 14, 1997 to discuss this interface. At present, BellSouth is meeting its contractual obligations regarding MCI's access to SAG data.
- **Common Graphical Interface (CGI):** CGI specifications were sent to you by the account team on November 7, 1997. These specifications will allow MCI to build its Common Graphical Interface. The next release of specifications is in development. This will be a supplement to the existing specifications and will allow MCI to add some fields that are not represented in the current specifications. MCI does not have to wait for the next release to begin building its Common Graphical Interface since the next release will simply be an extension of the existing specifications. Once MCI has reviewed the specifications, BellSouth can establish a Joint Implementation Team (JIT) with MCI to begin developing plans, including timelines, to implement CGI.

We will keep you apprised as to our progress on each of these important issues. Meanwhile, if you have any questions or need additional information, please call me at 404-927-7530.

Sincerely,



Mark Feidler

Page 1

Clifford H. Bowers /AL,BRHM07 11/24/97 15:47

Dated: 11/20/97 at 15:28
Contents: 3

MESSAGE

Subject: RE: CGI

Sender: Clifford H. Bowers /AL,BRHM07

Item 1

FROM: Clifford H. Bowers /AL,BRHM07 (Undisplayable address parts)
TO: bryan green /internet (0002169860@mciemail.com)
CC: Judy Rueblinger /AL,BRHM05 (Undisplayable address parts)
Bob Siegel /AL,BRHM02 (Undisplayable address parts)
Linda W. Tate /AL,BRHM08 (Undisplayable address parts)

Item 2

Bryan,

I have been working with Bob Siegel to obtain responses to your questions from the attached. Bob has just confirmed that our target date for providing the CGI release 1.1 specifications will be 12/12/97.

The enhancements that will be included in this release have not yet been finalized. Bob has promised to let me know as soon as he can as to when the 1.1 enhancements will be confirmed so that I can convey that to you. We will provide you a list of the planned enhancements as soon as they are available.

Cliff

Item 3

MESSAGE

Subject: RE: CGI

Creator: Bryan!Green /internet (Bryan.Green@mci.com)

Dated: 11/13/97 at 13:43
Contents: 3

Item 3.1

FROM: Bryan!Green /internet (Bryan.Green@mci.com)
TO: Clifford H. Bowers /AL,BRHM07
CC: Pamela K. Lee /AL,BRHM07
Judy Rueblinger /AL,BRHM05
Bob Siegel /AL,BRHM02
Alan!Anglyn /internet (Alan.Anglyn@mci.com)
Anna!Hopkins /internet (Anna.Hopkins@mci.com)

Item 3.2

ARPA MESSAGE HEADER

Item 3.3

Cliff,

After reviewing the attached CGI specifications, we have determined that they are the same specifications that we received on 9/5/97. Your note mentions that release 1.1 will be available in the next four weeks or so. In order for our developers to evaluate the specs as quickly as possible, we would need a more accurate availability date as well as a list of the enhancements release 1.1 will support.

Please let me know if you will be able to provide me with the requested information by 11/20/97. If you are unable to meet this date, please let me know when I can expect to receive.

Bryan

-----Original Message-----

From: Clifford H. Bowers [SMTP:Clifford.H.Bowers@bridge.bellsouth.com]
Sent: Friday, November 07, 1997 5:24 PM
To: Bryan Green
Cc: Pamela.Lee; Judy.Rueblinger1; Bob.Siegel

Clifford H. Bowers /AL,BRHM07 11/24/97 15:47

Page 2

Subject: CGI

<< Message: CGI >> Bryan,

Attached are the release 1.0 CGI specifications. These should give your folks something they can begin working with. Also notice that Bob should have release 1.1 specifications in around four weeks.

Thanks,

Cliff

MESSAGE

Dated: 12/12/97 at 13:45

Subject: Loss Notification/LNP Meeting/TCIF 7 Meeting/CGI

Contents: 2

Creator: Clifford H. Bowers /AL,BRHM07

Item 1

FROM: Clifford H. Bowers /AL,BRHM07 { Undisplayable address parts }
TO: alan anglyn /internet (alan.anglyn@mci.com)
CC: Beth G. Craig /MS,JCSN01 { Undisplayable address parts }
bryan green /internet (0002169860@mcimail.com)
Marcia Moss /AL,BRHM02 { Undisplayable address parts }
Judy Rueblinger /AL,BRHM05 { Undisplayable address parts }
Bob Siegel /AL,BRHM02 { Undisplayable address parts }
Linda W. Tate /AL,BRHM08 { Undisplayable address parts }

Item 2

Alan,

We appreciate your and Bob's participation in the change management meeting yesterday. You did a great job in representing MCI's needs. The following is a status of the items we discussed following the meeting with Linda Tate.

1) Loss Notification Enhancements: Linda said she has already submitted a change request to develop a plan and schedule for MCI's request to include daily notifications and partial disconnect data as part of the loss notification process over NDM. She also agreed to begin looking at how we can address MCI's request to be notified of UNE losses, ie., ports, loops, etc. We have scheduled a conference call with you for 10:30 a.m. on 1/6/97 to discuss the status and plans to address these enhancements as well as clarify MCI's needs and expectations in this area.

2) LNP Meeting: As regards your request to discuss LNP and how BST will handle from an EDI standpoint LNP orders prior to TCIF 8, Linda referred me Beth Craig. I have a call into Beth to see if she can join us for our 1/7/97 OSS meeting. I will let you know as soon as I hear from her. Linda will advise what two LNP data elements are already mapped or will be contained in the TCIF issue 7 map.

3) TCIF 7 Specifications Review Meeting: We have tentatively agreed to meet 1/21/98 and 1/22/98 to review the TCIF 7 specifications including rejects/clarifications (1st day) and loop/ports (2nd day). In this meeting we will review with you and your SMEs the mapping, etc., required for TCIF 7. As Linda stated yesterday, LNP and 4 UNEs (Loop, Port, INP, and LINP) have already been mapped, and we will be prepared to discuss all except for LNP (since it will have already been addressed in 2 above) in the meeting. Please confirm if MCI can meet those days or whether we should look at other dates.

4) CGI Specifications: We will provide you the CGI release 1.1 specifications on 12/15. We need to know as quickly as you can provide, what MCI's desired schedule for implementation will be (in order to provide implementation support if needed) and the name and version of the web screen scraping tool MCI will use with this application.

Please let me know if you have any questions.

Cliff

Clifford H. Bowers /AL,BRHM07 12/18/97 14:52

Page 1

MESSAGE

Subject: CGI

Dated: 12/15/97 at 17:15

Creator: Bob Siegel /AL,BRHM02

Contents: 3

Item 1

FROM: Bob Siegel /AL,BRHM02 { Undisplayable address parts }
TO: bryan green /internet (0002169860@mciemail.com)
CC: Clifford H. Bowers /AL,BRHM07 { Undisplayable address parts }

Item 2

See attached CGI specifications

Item 3

Table of Contents

1. Overview

2. General Interface Specifications

2.1 Interface Overview

2.2 Connectivity

2.3 Security

2.3.1 Lan-to-Lan

2.3.2 Dial-up

2.3.3 Internet

3.1 Input/Output Requirements for Establishing a Session

3.1.1 Initial Access

3.1.2 Authentication

3.1.3 Select Action

shes to
Notify the CGI server of the functionality that the application will
access.

3.2 Input/Output Requirements for Street Address Validation

3.2.1 Street Address Validation Request

3.2.2 Validate Address

3.2.3 Successful Street Address Validation Acknowledgment

3.3 Telephone Number Reservation

3.3.1 Telephone Number Reservation Selection

3.3.3 Telephone Number Selection

3.3.4 Telephone Number Reservation

3.4 View Installation Calendar

3.4.1 View Installation Calendar Selection

3.4.2 Return to Inquiry Screen

3.5 View Available Features and Services for Inquiry

3.5.1 View Available Features and Services for Inquiry Selection

3.6 View Firm Order Confirmation/Completion Notice (FOC/CN)

3.6.1 Select FOC/CN Action

3.6.2 Retrieve Purchase Order Numbers

3.6.3 Retrieve Purchase Order Number Details

3.7 View Order Status

3.7.1 Select View Order Status Action

3.7.2 View Order Status

3.8 View LSR in Error

3.8.1 Select View LSR Errors Action

REPLY

ed: 1/5/98 at 12:15

Subject: LENS Feature Release 1.4

Contents: 2

Creator: Judy Rueblinger /AL,BRHM05

Item 1

TO: Alan.Anglyn@MCI.com
CC: Anna.Hopkins@MCI.com
Beverly.Gordon@MCI.com
Clifford H. Bowers /AL,BRHM07 { Undisplayable address parts }
Bryan.Green@MCI.com
Helen.Arthur@MCI.com
Judy Rueblinger /AL,BRHM05 { Undisplayable address parts }

Item 2

Alan,

We have verified that changes in the 1.4 LENS release will not affect the current CGI specifications.

If you have any other questions don't hesitate to call me.

Thanks,

Judy

REQUEST: On page 4 his Confidential Affidavit Mr. Gary M. Wright takes the position that Sprint PCS and PowerTel are providing facility-based wireless local exchange service to both business and residential customers utilizing FCC-licensed PCS spectrum.

- (a) For each BellSouth Tennessee exchange where Sprint PCS is providing local exchange service identify:
- i. the number of residential Customers beginning provided local exchange service by Sprint PCS,
 - ii. the monthly recurring and/or usage rate for Sprint PCS' residential customers,
 - iii. the monthly recurring and/or usage rate for BellSouth residential customers and
 - iv. the average toll revenue per minute, and.
 - v. the average local exchange and toll minutes of use for BellSouth residential customers. (If the average local exchange minutes of use for BellSouth residential customers is not available by exchange, provide the average local exchange minutes of use for BellSouth Tennessee residential customer in total.)
 - vi. the number of customers replacing BellSouth's local exchange service with Sprint PSC.
 - vii. please admit or deny:

BellSouth does not know of any local exchange customer who has replaced BellSouth's traditional facilities based local exchange service in Tennessee entirely with Sprint PSC.

- REQUEST: (b) For each BellSouth Tennessee exchange where PowerTel is providing local exchange service identify:
- I. the number of residential Customers being provided local exchange service by PowerTel.
 - ii. the monthly recurring and/or usage rate for PowerTel's residential customers,
 - iii. the monthly recurring and/or usage rate for BellSouth residential customers,
 - iv. the average toll revenue per minute, and
 - v. the average local exchange and toll minutes of use for BellSouth residential customers. (If the average local exchange minutes of use for BellSouth residential customers is not available by exchange, provide the average local exchange minute of use for BellSouth Tennessee residential customer in total.)
 - vi. the number of customers replacing BellSouth's local exchange service with PowerTel.
 - vii. please admit or deny:
BellSouth does not know of any local exchange customer who has replaces BellSouth's transitional facilities based local exchange service in Tennessee entirely with PowerTel.

REQUEST: (c) On page 54 Mr. Wright states Sprint PCS basic service package:

. . . . competes with traditional wireline basic local exchange service offers for a significant number of low-use Sprint PCS residential and business customers.

- i. Define the term "**low-use residential**" customer as used by Mr. Wright.
- ii. What is the number of local exchange minutes that would qualify a residential customer as a "low-use residential" customers.
- iii. Identify the number of BellSouth customers in the area served by Sprint PCS that qualify as "low-use residential" customers.
- iv. Provide copies of all analysis, studies, research papers, documents etc. in BellSouth's its subsidiaries', or affiliates' possession that support Mr. Wright's assertion that the Sprint PCS basic service package competes with traditional wireline basic local exchange service for a **significant** number of "low-use residential" customers.

(d) On page 56 of his affidavit Mr. Wright states that PowerTel PCS basic service package:

. . . . competes with traditional wireline basic local exchange service offering for a significant number of low-use residential and business customers.

- i. Identify the number of BellSouth customers in the area served by PowerTel that qualify as "low-use residential" customers.

REQUEST: ii. Provide copies of all analysis, studies, research papers, etc. in BellSouth, its subsidiaries, or affiliates possession that support Mr. Wright's assertion that the PowerTel PCS basic service package competes with traditional wireline basic local exchange service for a **significant** number of "low-use residential" customers.

RESPONSE: (a) i. BellSouth does not have sufficient information to allow it to identify the exact number and class of service of customers served by facility-based wireline or wireless local exchange competitors. Much of the information available to BellSouth to allow it to estimate the number of wireline facility-based CLEC customers is not available to BellSouth for use in estimating the number of wireless CLEC customers served. However, BellSouth estimates that Sprint PCS is providing wireless PCS communications to several thousand business and residence customers in its current Nashville serving area.

 ii. Sprint PCS offers a wide variety of basic and enhanced PCS packages which included combinations of usage and features. Unlike PowerTel (whose standard service packages are described below), Sprint PCS currently does not have a national pricing structure but rather establishes its basic and enhanced service package pricing based on local market conditions in each of its service areas. Generally speaking the Sprint PCS offerings are priced 10% to 15% below comparable offerings by the incumbent Cellular service providers in any given market.

 iii. This data is not currently available because BellSouth does not know exactly where Sprint PCS is providing local exchange service. However, the monthly recurring and/or usage rates for BellSouth residential customer are contained in Section A.3.2 of BellSouth's General Subscriber Tariff.

RESPONSE (cont'd):

- iv. This data is not currently available because BellSouth does not know usage toll revenue estimates for Sprint PCS customer; however the average toll revenue per BellSouth customer is \$.1648 per minute.
- v. BellSouth does not track non-billable local usage; however BellSouth's billable usage for BellSouth's total customers is 3,599,386,306 minutes of use (mou) per month.
- vi. BellSouth has not yet completed market research studies for PCS usage in Tennessee. However, a copy of a study performed by M/A/R/C Research of PCS usage in Louisiana market is attached as Exhibit 9-a for reference as part of this response. As indicated in Table 3 Page 5 of the attached study, approximately 7% of Louisiana residential PCS users eliminated wireline service and replaced it with PCS. The study also notes that a substantial percentage of customers report "choosing PCS instead of wireline service while initiating phone service for the first time". [p.5]. Preliminary (unaudited) results of an uncompleted study of PCS usage in the Louisville, KY market is currently indicating similar percentages for PCS replacement of wireline services. Sprint PCS is the largest PCS provider in both the Kentucky and Louisiana markets serving the Louisville and New Orleans.

RESPONSE (cont'd):

- vii. BellSouth cannot yet identify or quantify specific Sprint PCS customers who have entirely replaced BellSouth's traditional facilities based local exchange service in Tennessee at this time, although BellSouth believes that such customers do exist.
- (b)
 - i. BellSouth does not have sufficient information to allow it to identify the exact number and class of service of customers served by facility-based wireline or wireless local exchange competitors. Much of the information available to BellSouth to allow it to estimate the number of wireline facility-based CLEC customers is not available to BellSouth for use in estimating the number of wireless CLEC customers served. However, BellSouth estimates that PowerTel is providing wireless PCS communications to several thousand business and residence customers in its current Memphis serving area.
 - ii. Exhibit 9-b attached provides a detailed description of PowerTel's current rate plan packages as offered in it Tennessee serving area. PowerTel's "Personal Power" plan options provided blocks of 100 to 1000 anytime minutes for a monthly fee ranging from \$20 to \$90. Additional usage beyond that included in the Personal Power Plan selected are billed at from \$0.35 to \$0.10 per minute depending on the plan selected. Every plan includes Voice mail, Paging, Caller ID, Caller ID Block, Call Waiting, E911 calls, and first incoming minute free. Long distance calls within PowerTel's twelve state service region are billed at \$0.10 per minute under all service plans. Unlimited long distance calls anywhere within the twelve state region are provided for a flat \$15.00 monthly charge with a companion service plan.

RESPONSE (cont'd):

- iii. This data is not currently available because BellSouth does not know exactly where PowerTel is providing local exchange service. However, the monthly recurring and/or usage rates for BellSouth residential customer are contained in Section A.3.2 of BellSouth's General Subscriber Tariff.
- iv. This data is not currently available because BellSouth does not know usage toll revenue estimates for PowerTel's customer; however the average toll revenue per BellSouth customer is \$.1648 per minute.
- v. BellSouth does not track non-billable local usage; however BellSouth's billable usage for BellSouth's total customers is 3,599,386,306 minutes of use (mou) per month.
- vi. BellSouth has not yet completed market research studies for PCS usage in Tennessee. However, a copy of a study performed by M/A/R/C Research of PCS usage in Louisiana market is attached as Exhibit 9-a for reference as part of this response. As indicated in Table 3 Page 5 of the attached study, approximately 7% of Louisiana residential PCS users eliminated wireline service and replaced it with PCS. The study also notes that a substantial percentage of customers report "choosing PCS instead of wireline service while initiating phone service for the first time". [p.5]. Preliminary (unaudited) results of an uncompleted study of PCS usage in the Louisville, KY market is currently indicating similar percentages for PCS replacement of wireline services.
- vii. BellSouth cannot yet identify or quantify specific PowerTel's PCS customers who have entirely replaced BellSouth's traditional facilities based local exchange

service in Tennessee at this time, although BellSouth believes that such customers do exist.

RESPONSE (cont'd):

- (c)
 - i. The term "low-use" customers refers to that segment of the Tennessee residential wireline local exchange customer base whose average local billing usage patterns allow them to economically replace their current wireline services in whole or in part with the wireless PCS offerings.
 - ii. PCS services may be considered an effective wireline replacement by a wide variety of telecommunications service customers for a number of reasons specific to that user. These reasons include the features included as part of the overall service package, the added value of mobility, the different geographic areas each provider defines as "local" and "toll" and the particular calling patterns of the user. In general terms residential customers with less than 400 minutes of local usage per month may find PCS offerings to be a very competitive alternative to wireline services, particularly when considered in conjunction with other user specific factors as desired feature capabilities, toll dialing habits, and the added value of mobility.
 - iii. This information is not available for the State of Tennessee.
 - iv. A copy of the Louisiana PCS Usage Study is provided as Exhibit 9-a.
- (d)
 - i. The term "low-use" customers refers to that segment of the Tennessee residential wireline local exchange customer base whose average local billing usage patterns allow them to economically replace their current wireline services in whole or in part with the wireless PCS offerings.

BellSouth Telecommunications, Inc.
TRA Docket 97-00309
CAD's Second Discovery Request
Dated March 6, 1998
Item No. 9
Supplemental Response
Page 9 of 9

RESPONSE (cont'd):

- ii. A copy of the Louisiana PCS Usage Study is provided as Exhibit 9-a.



Louisiana PCS Study

Prepared by:

M/A/R/C

November 4, 1997

Background

On behalf of BellSouth, M/A/R/C conducted a study in Louisiana and the balance of BellSouth's nine state region to assess customer purchase motivations in choosing PCS, and to identify customer behavior in using PCS. The specific goal of the study was to determine the extent to which customers view PCS and wireline service as substitutes and, ultimately, competitive alternatives.

Objectives

The primary purpose of this research was to examine the PCS market for the presence of the following groups:

Purchasing PCS Service

- Customers who terminate local wireline service and switch to PCS exclusively.
- Customers who want to expand their communications ability and opt to obtain PCS instead of adding traditional local wireline service (a second or third local line).
- Customers who, when first signing up for service, subscribe to PCS instead of local wireline service.

Using PCS Service

- Customers who use PCS as their primary telephone at home or work.
- Customers who use PCS instead of a regular wireline phone to make or receive calls at home or work.
- Customers who use PCS when away from home or work rather than use the wireline phone of a friend, business associate, or another individual or business.

Research Methodology/Sampling

In order to assess the PCS market from multiple perspectives, M/A/R/C conducted a multi-phase research study among current PCS users to accomplish the study objectives. The current low penetration of PCS also influenced the need for multiple data collection phases. The methodology included three different phases of data collection via telephone interviewing and two different phases of data collection via online interviewing. A total of 841 interviews were conducted, as seen below.

Phase 1—Telephone (N=400)

- Interviews with a random sample of current customers of BellSouth Mobility DCS (PCS offered by BellSouth in North Carolina, South Carolina, and East Tennessee). The list of current customers from which the sample was selected was provided to M/A/R/C by BMDCS.

Phase 2—Telephone (N=15)

- Interviews with a sample of former customers of BellSouth Mobility (cellular telephone service) in the New Orleans, Louisiana area who have since signed up with a PCS provider. The list of former customers (all of whom M/A/R/C attempted to contact) was provided to M/A/R/C by BellSouth Mobility.

Phase 3—Telephone (N=177)

- Interviews with PCS customers of Sprint and PrimeCo in the New Orleans, Louisiana area. These customers responded to an ad seeking PCS customers that was placed in two local publications, The Times-Picayune (the largest daily newspaper), and the Gambit (a weekly entertainment publication). Responders called an 800 number to be verified as PCS customers, and if qualified, completed a telephone interview. (See Attachment for a copy of the ad).

Phase 1—Online (N=241)

- Interviews with customers of various PCS providers throughout BellSouth's nine-state region, including the State of Louisiana. These customers, who are subscribers to America Online (AOL), were pre-screened via M/A/R/C's Opinion Place site on AOL, and qualified PCS users were invited to another online site to complete the PCS survey.

Phase 2—Online (N=8)

- Interviews with customers of PCS providers in the State of Louisiana. These customers, who are subscribers to America Online, had been pre-screened via M/A/R/C's ongoing Quick Quiz online screener over the last several months. Qualified PCS users were recontacted via e-mail and invited to complete the PCS survey online.

To better address the objectives of the research, data from PCS users in the State of Louisiana identified in different phases were combined and analyzed together. And, in order to provide a frame of reference for the Louisiana findings, three additional groups were analyzed—total PCS users, BMDCS PCS users, and PCS users outside of Louisiana in BellSouth's nine-state region that are not BMDCS users. Here is a breakout of the sample sizes for each group.

- PCS users in total (n=841)
- BMDCS PCS users (n=456)
- PCS users in Louisiana only (n=200)
- PCS users outside of Louisiana in BellSouth's nine state region that are not BMDCS users (n=185)

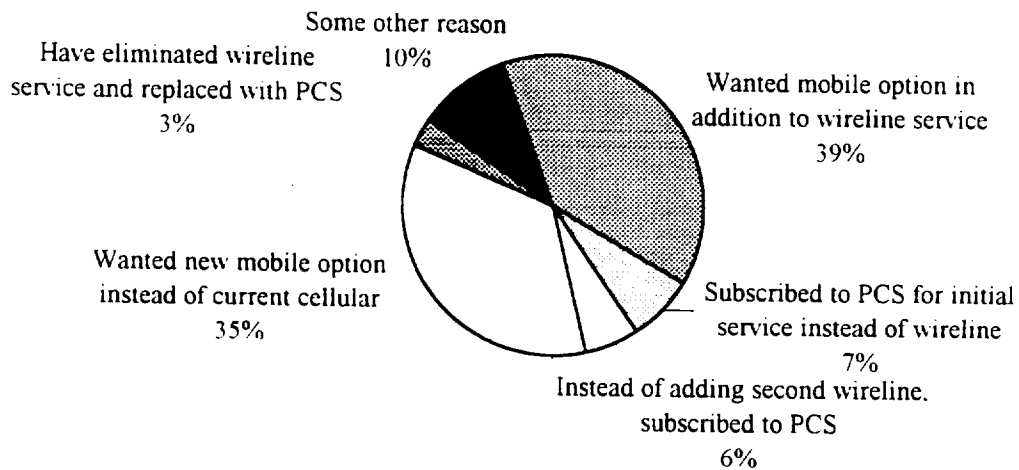
In addition, respondents were divided into two groups for analysis and comparison based on whether or not their usage of PCS is primarily for business or personal reasons.

Research Findings

Purchase Motivations for PCS

All respondents were asked which of five different reasons best represented why they chose to establish mobile service with a PCS provider. As seen in Graph 1 below, two main reasons emerge as motivations for purchasing PCS—the desire to add a mobile communication option and the desire to replace traditional cellular service with PCS.

Graph 1—Main Reason for Choosing PCS



Interestingly, people who use PCS primarily for personal reasons differ somewhat in their key motivations from people who use PCS primarily for business. As seen in Table 1, "personal usage" customers are more likely than "business usage" customers to want PCS because of a desire to add a mobile option. This suggests that for many "personal usage" PCS customers, this is the first time they have purchased any wireless service.

Table 1—Want Mobile Option In Addition to Wireline Service

	Total PCS Users	BMDCS Users	Louisiana PCS Users	Competitive PCS Users Non-Louisiana
	%	%	%	%
Total	39	45	30	36
Mostly Business Usage	23	26	14	28
Mostly Personal Usage	54	57	56	43

On the other hand, as seen in Table 2, customers who use PCS primarily for business purposes are more likely to be switching from a current cellular option to PCS. This may just represent the fact that business users are more likely to already be using a wireless service. Table 2 also shows that the desire to switch away from a current cellular option is a particularly strong motivation among PCS users in Louisiana.

Table 2—Want New Mobile Option Instead of Current Cellular

	Total PCS Users %	BMDCS Users %	Louisiana PCS Users %	Competitive PCS Users Non-Louisiana %
Total	35	28	49	39
Mostly Business Usage	44	33	61	43
Mostly Personal Usage	27	24	28	37

There are notable groups of PCS customers whose decision to subscribe to PCS in some way takes the place of acquiring initial or incremental wireline service. Three different scenarios emerge. The first scenario, seen in Table 3, shows that a small percentage of customers do opt to purchase PCS for all their voice communications, and have *replaced* their residential wireline phone with PCS.

Table 3—Have Eliminated Wireline Service and Replaced With PCS

	Total PCS Users %	BMDCS Users %	Louisiana PCS Users %	Competitive PCS Users Non-Louisiana %
Total	3	2	3	4
Mostly Business Usage	3	3	1	7
Mostly Personal Usage	2	2	7	1

Table 4 displays a second scenario. A substantial percentage of customers, especially in Louisiana and among business users, report choosing PCS *instead of* wireline service while initiating phone service for the first time for their residence or place of business.

Table 4—Subscribed to PCS For Initial Service Instead of Wireline

	Total PCS Users %	BMDCS Users %	Louisiana PCS Users %	Competitive PCS Users Non-Louisiana %
Total	7	7	10	3
Mostly Business Usage	12	14	14	6
Mostly Personal Usage	1	2	1	—

The final scenario, as seen below in Table 5, indicates a sizable percentage of customers had a need to add another telephone at their home or place of business, and decided to add PCS service *instead of* incremental wireline service.

Table 5—Instead of Adding Second Wireline, Subscribed to PCS

	Total PCS Users %	BMDCS Users %	Louisiana PCS Users %	Competitive PCS Users Non-Louisiana %
Total	6	5	4	10
Mostly Business Usage	7	7	4	10
Mostly Personal Usage	5	3	4	10

Impact of PCS Usage on Local Wireline Service

All respondents were asked which of several statements describe how they use PCS service. Clearly, PCS subscribers use PCS to meet a variety of communications needs. In most cases, it appears that the freedom and flexibility of being mobile while communicating is the fundamental benefit. In many situations, this represents a notable advantage for PCS over traditional wireline service. In fact, feedback from PCS customers suggests that PCS usage often occurs *instead of* wireline telephone usage. Before having PCS, some customers relied on wireline service to make or receive some calls for which they now utilize PCS instead.

Not surprisingly, calls made or received away from the home or primary place of business represent the primary use of PCS. Even though these calls occur away from the customer's home or primary place of business, cannibalization of local wireline service does occur in some cases.

As seen in Table 6, a majority of PCS users now use PCS to make calls when away from the home or place of business *instead of* using the wireline service of friends, business associates, or other individuals or businesses (as they may have done in the past). This finding is especially strong in Louisiana.

Table 6—Make Calls Away From Home/Place of Business Using PCS Instead of Using Wireline Service of Friends and Business Associates

	Total PCS Users	BMDCS Users	Louisiana PCS Users	Competitive PCS Users Non-Louisiana
	%	%	%	%
Total	69	73	80	45
Mostly Business Usage	67	73	84	32
Mostly Personal Usage	70	74	72	57

Table 7 suggests that a notable percentage of PCS customers utilize PCS just as they might otherwise use their traditional wireline service. A sizable group, especially among business users in Louisiana, relies on PCS as the primary phone service for their home or business. Their reliance on PCS as the primary phone is an indication of the premium these users place on having mobility while communicating. As suggested earlier in Tables 3 and 4, some of these PCS users, especially business users, may not even maintain a wireline phone.

Table 7—Use PCS As Primary Home/Business Phone

	Total PCS <u>Users</u>	BMDCS <u>Users</u>	Louisiana <u>PCS Users</u>	Competitive PCS Users <u>Non-Louisiana</u>
	%	%	%	%
Total	16	14	29	10
Mostly Business Usage	29	29	37	16
Mostly Personal Usage	5	3	15	4

Table 8, which focuses on PCS customers with more personal than business usage, reveals that a sizable percentage, especially in Louisiana, use PCS instead of using an existing wireline phone to make or receive calls at home. Convenience and the temporary lack of availability of the wireline phone (other family members using the phone, accessing the Internet, etc.) are the possible drivers of this type of behavior.

Table 8—Use PCS To Make/Receive Calls At Home Instead of Using Wireline Phone

	Total PCS <u>Users</u>	BMDCS <u>Users</u>	Louisiana <u>PCS Users</u>	Competitive PCS Users <u>Non-Louisiana</u>
	%	%	%	%
Mostly Personal Usage	37	28	56	47

Similar to the previous finding, Table 9 indicates that nearly half of PCS customers with mostly business usage (especially in Louisiana) utilize their PCS phone as a second telephone at work, which may *reduce* or *eliminate* the need to add a second wireline phone.

Table 9—Use PCS As A Second Telephone At Work

	Total PCS <u>Users</u>	BMDCS <u>Users</u>	Louisiana <u>PCS Users</u>	Competitive PCS Users <u>Non-Louisiana</u>
	%	%	%	%
Mostly Business Usage	40	41	47	27

Conclusions

The results of this study clearly indicate the following.

- The introduction of PCS is expanding the market for wireless services (i.e., attracting many first-time customers to wireless) in Louisiana and other areas, and is also cannibalizing business from providers of cellular service.
- A secondary impact of the introduction of PCS on telecommunications purchase patterns is to cannibalize some business from providers of traditional wireline service in Louisiana and other areas. This comes from three main purchase scenarios, listed below from most to least prevalent:
 - Customers who subscribe to PCS *instead of* wireline when initiating service
 - Customers who add PCS *instead of* a second wireline
 - Customers who have *eliminated* wireline altogether and *replaced* with PCS
- The usage of PCS cannibalizes usage of traditional landline service in Louisiana and other areas. Large numbers of customers report using PCS as an alternative to wireline service in the following ways.
 - They make calls away from home or their place of business using PCS *instead of* using wireline service of friends and business associates.
 - They use PCS to make or receive calls at home *instead of* using a wireline phone.
 - They use PCS as a second telephone at work, *in addition to* having a wireline phone.
 - They use PCS as the *primary* home or business phone.
- While there was minor variation of results across the different geographies and customer groups included in the study, these conclusions do apply for each geography and customer group studied, including PCS customers in Louisiana.

Powertel Rate Information

MONEY IN YOUR POCKET

Stay in touch with the amazing compact phone, pager and answering machine in one. Powertel PCS digital technology puts you in control by giving you the power to handle your calls - and costs - the way you want.

The Anytime Minutes You Need

Go ahead and make those calls. Each Powertel rate plan includes plenty of Anytime Minutes that you can use any day, any time, any way you want.

Caller ID & Your 1st Minute Free

Built-in Caller ID lets you decide whether to answer, or to let your caller leave a message or page. And since the first minute is free, if you handle incoming calls within a minute, there's no charge.

No Contract, No Strings

No long-term contracts or commitments. Just choose the rate plan you want. You may change plans as your needs change.*

Roaming Fees

Powertel offers affordable, predictable roaming rates throughout North America with no daily access charges. And as long as you're anywhere within Powertel's PCS Service Area, you can call anyplace without being charged a roaming fee. Powertel's PCS Service Area is defined in our Coverage brochure. See your local Powertel retailer for details.

Special Long Distance Rates

Within Powertel's PCS Service Area, our long distance rates are especially low. There are special packages available for regional or individual state calling.

Save Big On Local Calls

When you're in Powertel's PCS Service Area, calls within the city you're visiting are considered local calls, not long distance. A simple, sensible money-saving plus from Powertel.

Get All Your Calls

Any caller can leave a message in your Powertel voice mail any time, no matter if you're using your phone, or you don't answer, or if your handset's turned off.

Get All Your Pages

With Powertel, your handset display will show the incoming number - even if you're on the phone - so you can call back at your convenience.

Relax, It's Private

With Powertel's GSM technology, no one can eavesdrop on your conversations. Your phone number can't be cloned.

Custom Call Service

You can block your choice of incoming, outgoing and/or international calls, and change your choice as often as you want. **\$3/mo.**

Call Forwarding

If you would temporarily prefer to have your calls sent to your office or home phone, it's easily done. **\$2/mo.**

Powertel MailSM

Enhanced voice mail, including broadcast messaging, voice signature, deferred

to Numbers anywhere in the Twelve State Region**	\$15/month
Unlimited Long Distance for Each State**	\$5/month/state
Roaming outside Powertel's PCS Service Area	
Local Airtime	50¢/minute****
Long Distance	25¢/minute***

Directory Assistance Area Code + 555-1212	50¢ each
--	----------

SPECIAL OFFER

For all subscribers to our \$20/100 minute a month plan, for just \$10 more you can double your minutes. That means 200 minutes you can use anytime, day or night, for just \$30 a month.

*There is a \$20 service charge to change to a lower monthly rate plan.

**These states are included collectively for \$15 a month or individually for \$5 a month: Florida, Georgia, Mississippi, Alabama, Tennessee, Kentucky, South Carolina, Arkansas, Missouri, Indiana, Illinois and Louisiana. Not available with all rate plans. Airtime charges apply.

***International rates vary.

****Roaming on networks outside North America or in non GSM networks will incur additional charges.

Note: Handsets and taxes are extra. Credit approval required. All calls rounded to the nearest full minute. Subject to Powertel Terms and Conditions of Service.

delivery and mailbox-to-mailbox messaging. **\$5/mo.**

Powertel FaxSM

Use enhanced data/fax capability to store incoming faxes until you direct them to print to any fax number you choose. **\$4/mo.**

Alphanumeric Messaging and Paging*

Unlimited text messages of up to 160 characters and send up to 200 messages per month. **\$10/mo.**

Detailed Billing

See where you're spending your time. **\$3/mo.**

*For a low monthly fee of \$10, you may receive an unlimited number of short messages and send up to 200 short messages from your handset. All mobile originated messages sent from your handset beyond 200 will be charged at \$0.10 per message.

RATE PLAN

	PERSONAL PERSONAL PERSONAL PERSONAL PERSONAL				
	POWER 20	POWER 40	POWER 50	POWER 70	POWER 90
Price					
Per Month	\$20	\$40	\$50	\$70	\$90
Anytime					
Minutes	100	400	500	700	1000
Included					
Each					
Additional	35¢	25¢	15¢	12¢	10¢
Minute					
One-Time					
Activation	\$30	\$30	\$30	\$30	\$30
Fee					

FEATURES AND SERVICES (no extra charge)

Every plan includes: Voice Mail, Paging (numeric), Caller ID, Caller ID Block, Call Waiting, Free 911 Calls, 1st Incoming Minute Free and Free 611 Customer Service Calls.

EXTRA SERVICES (for every plan)

From within Powertel's PCS Service Area

Long Distance Calls to

Numbers within
the Twelve State Region** 10¢/minute

Long Distance Calls to

Numbers outside the Twelve
State Region** 15¢

Unlimited Long Distance Calls
to Numbers anywhere in the

CERTIFICATE OF SERVICE

I hereby certify that on March 24, 1998, a copy of the foregoing document was served on the parties of record, via facsimile or hand delivery addressed as follows:

Dennis McNamee, Esquire
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243-0500

Vincent Williams, Esquire
Consumer Advocate Division
426 5th Avenue, N., 2nd Floor
Nashville, TN 37243

Dana Shaffer, Esquire
Nextlink
105 Malloy Street, #300
Nashville, TN 37201

Enrico C. Soriano
Kelley, Drye & Warren
1200 19th St., NW, #500
Washington, DC 20036

H. LaDon Baltimore, Esquire
Farrar & Bates
211 Seventh Ave. N, # 320
Nashville, TN 37219-1823

Carolyn Tatum Roddy, Esquire
Sprint Communications
3100 Cumberland Circle, N0802
Atlanta, GA 30339

Charles B. Welch, Esquire
Farris, Mathews, et al.
511 Union Street, #2400
Nashville, TN 37219

Guilford Thornton, Esquire
Stokes & Bartholomew
424 Church Street
Nashville, TN 37219

Henry Walker, Esquire
Boult, Cummings, et al.
P. O. Box 198062
Nashville, TN 37219-8062

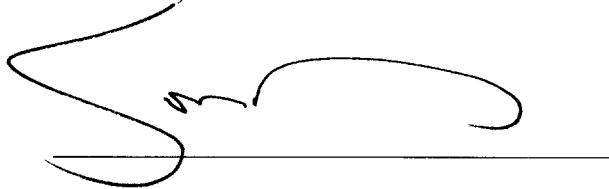
D. Billye Sanders, Esquire
Waller, Lansden, Dortch & Davis
511 Union St., #2100
Nashville, TN 37219-1750

Jon E. Hastings, Esquire
Boult, Cummings, et al.
P. O. Box 198062
Nashville, TN 37219-8062

Andrew O. Isar, Esquire
Telecommunications Resellers Association
4312 92nd Ave., NW
Gig Harbor, WA 98335

James P. Lamoureux
AT&T
1200 Peachtree St., NE, #4068
Atlanta, GA 30367

Donald L. Scholes
Branstetter, Kilgore, et al.
227 Second Ave., N.
Nashville, TN 37219

A handwritten signature in black ink, appearing to read 'Donald L. Scholes', is written over a horizontal line.